SIAPARTNERS AMELIA

Implementing Conversational and Generative AI in Financial Services Contact Centers

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Introduction

Use cases of Conversational and Generative AI and the potential for value creation and preservation in client services

Artificial Intelligence (AI) has spurred a wave of rapid advancement across the technological landscape, creating innovative and transformative impacts for organizations that can effectively leverage its robust and diverse capabilities. This unique lever for growth, driven largely by Conversational and Generative AI, has incentivized companies to assess their existing technology infrastructure and processes to determine revenue-generating or cost-cutting use cases.

Current AI solutions in the financial services industry are primarily designed to enhance operational efficiency and reduce manual processing. Various challenges to contact centers, particularly in managing high call volumes or long handle times, have led some firms to implement AI-powered chatbots and virtual agents to enhance customer experience, streamline operations and reduce wait times.

However, different use cases and specific applications of AI make sense for different organizations: there is rarely an opportunity for a one-size-fits-all approach. This paper details some of the key considerations stakeholders should take note of to ensure proper integration, sustainability, usability, and maintenance prior to making investments in Artificial Intelligence.

AI: The transformative power

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Conversational AI: Improving Customer and Employee Experiences

Conversational AI harnesses Natural Language Processing (NLP), enabling machines to comprehend and respond to human language effectively.

In the banking sector, Conversational AI-driven virtual agents can engage customers in personalized, context-aware conversations to effectively address queries, process transactions, and seamlessly handle complex natural language requests. These Intelligent Virtual Agents (IVAs) can automate many banking interactions, from answering simple administrative FAQs to handling transactional experiences like transferring money, making payments, and reporting fraud.

By automating high-volume and repetitive interactions, Conversational AI empowers banks to enhance the customer experience, increase engagement, and optimize operational efficiency.

Generative AI: Stepping into the Future

Generative AI is a subset of artificial intelligence that focuses on the creation of new content by leveraging machine learning models. Such advances in deep learning have utilized techniques, exemplified by:

- Generative Adversarial Networks (GANs): A method of generating synthetic data similar to existing real data.
- Variational Autoencoders (VAEs): A method of generating new data samples modeled off the original data set, but with new content.
- Transformers: A method of taking an input and generating a new output.

These models have significantly enhanced the capabilities of Generative AI, leading to realistic content generation across various domains such as realistic image generation, text generation, and even music composition, opening vast possibilities for creative applications.

Generative AI also highlights the significant potential of Conversational AI and IVAs. By leveraging the natural, human-like conversations that Generative AI orchestrates, IVAs can develop deeper intelligence across a broader range of use cases at a faster rate. Furthermore, Generative AI accelerates the development and optimization of IVAs, helping businesses deploy change more quickly and evolve faster, realizing meaningful business outcomes like increased customer and employee satisfaction. Generative AI enables more robust self-service options and scales the provision of personalized interactions, particularly within the financial services industry.

While this technology promises to provide significant value, it also comes with limitations. For example, a financial institution cannot simply turn on a Generative AI chatbot, give it access to financial data, and let it interact with customers and employees without guardrails: the risks would be too great. Additionally, Generative AI does not understand the business processes and workflows required to execute transactions. To drive true business value, Generative AI needs to be paired with a Conversational AI platform that has enterprise-grade security and compliance features and is equipped with sufficient information to follow and execute business processes and transactions.

Data-Driven Insights: The Heart of AI

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AI is driven by data, and - especially in the banking sector - data-rich environments provide a treasure trove of insights and value. Once an IVA is deployed in production, its value can scale exponentially if leveraged effectively. Every interaction that the IVA handles can deepen its intelligence of the use cases it understands, which allows it to proactively build a roadmap of new use cases to improve future performance. Generative AI can streamline the creation of these new use cases to bolster both the depth and breadth of the IVA's intelligence.

What AI is not: addressing common myths

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Myth #1: AI Is the Silver Bullet and Answer to All Problems

While it may seem like there are infinite use cases in favor of Artificial Intelligence's business value, it is unfortunately not the answer to every problem that organizations face. Some simple manual tasks, such as checking account balances or transferring funds, do not necessitate a complex AI solution. There are cases when simple human interaction is preferable or even required to ensure seamless processing, like closing an account. Prioritizing a strong customer experience is still more important than digitizing a majority of an organization's workflow. Hence, organizations should be mindful of functions and processes that would not benefit from Conversational AI.

Myth #2: AI is A Solution You Can Set and Forget

Contrary to popular belief, Conversational AI is not a switch that can be flipped and implemented overnight. While the technology has become more convenient and agile over the years, it still requires proper training and continuous iterations to drive long-term business value. When companies release the first iteration of their Conversational AI solutions to customers and/or employees, their IVAs will often have challenges and gaps in understanding. Over time, IVAs will improve and be able to handle more complex queries.

Conversational AI and Generative AI technologies have the potential to revolutionize customer experiences in the banking sector. By understanding both the transformative capabilities and foundational limitations of these technologies, financial institutions will be well-equipped to leverage AI to enhance customer experiences, drive operational efficiency, and remain at the forefront of innovation in today's increasingly competitive landscape.
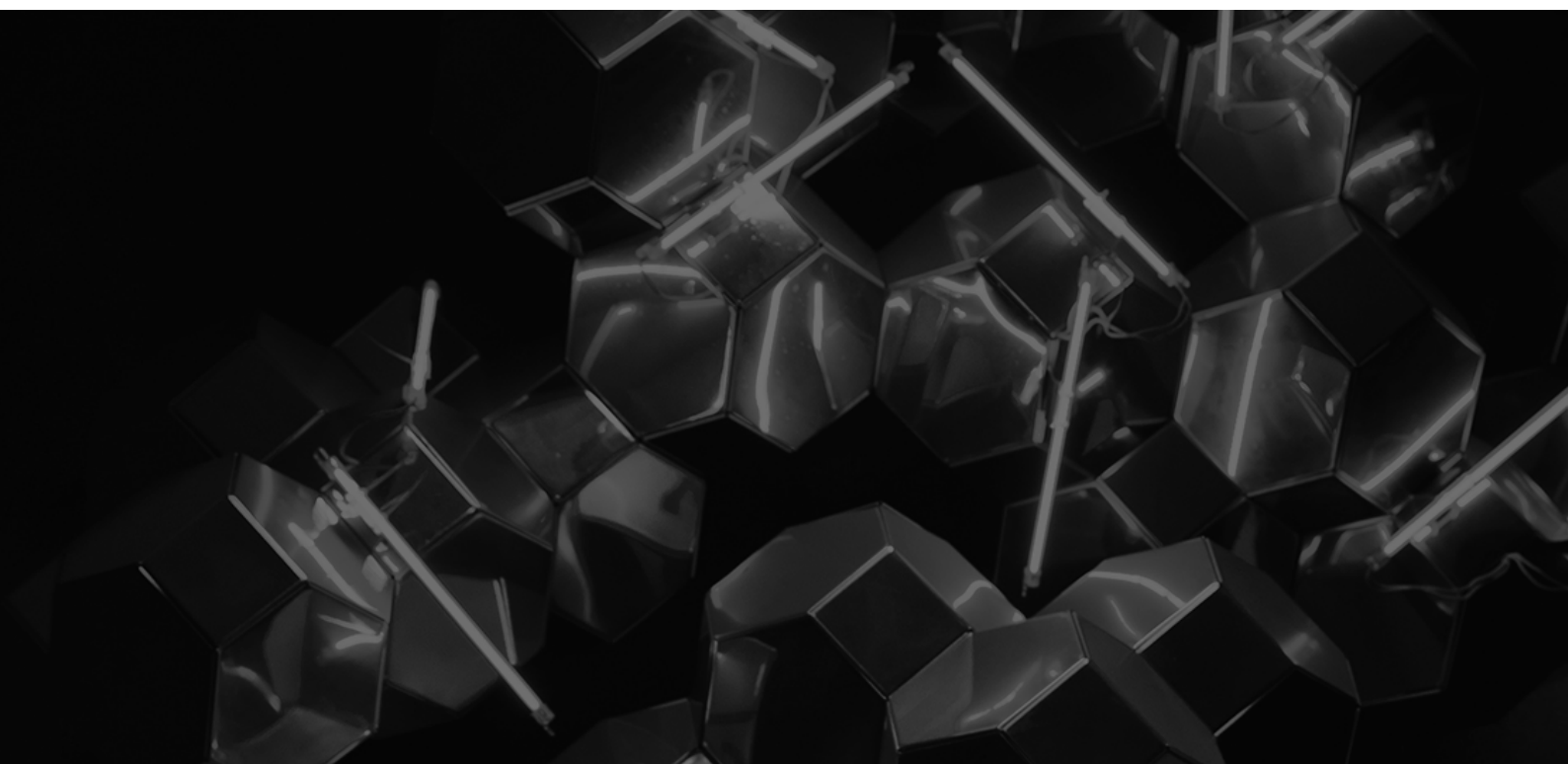
Executives across nearly every industry are turning to Conversational and Generative AI to not only improve outcomes and carve out competitive advantages, but also to stay relevant and effective. However, implementing AI for the sake of implementing AI without well thought out business cases, return on investment predictions, and risk analyses will likely leave a company financially burdened and at risk of process failure. Companies must have thoughtful conversations about which business functions can benefit from Artificial Intelligence, which vendors make sense for their needs, and how to mitigate risks to maximize the output of their investment(s).

This is especially true with Generative AI. A common challenge people face with this new and incredibly popular technology is a scenario in which AI will provide an incorrect response with the utmost confidence, which is known as a "hallucination." Generative AI can also unintentionally perpetuate biases present in training data, leading to biased or discriminatory outputs. Additionally, this technology raises concerns about data privacy and the potential misuse of generated content for malicious purposes. To address ethical concerns, organizations must adopt responsible AI practices, prioritize fairness and transparency, and comply with relevant regulations.

Align AI Strategy with Business Objectives. Before diving into an AI implementation, contact center executives in the financial sector must align their AI strategy with their broader business objectives. Understanding from the very beginning how AI not only enables but enhances existing business objectives – such as increasing customer satisfaction, improving operational efficiency and growing the bottom line – is a crucial first step to ensuring the success of AI implementation. To do so, business leaders should set clear, measurable goals that guide the AI development and adoption process, as well as enable organizations to assess the effectiveness of their AI solutions post-launch.

Advice for successful AI journeys

Empower Employees, Don't Replace Them. One major indication that an organization is not implementing AI thoughtfully is when they simply replace human employees with AI technology. AI is not a replacement but rather a complement and an accelerator of human ingenuity.

Within a banking contact center, Conversational AI and Generative AI should be viewed as enterprise tools that improve the employee experience for agents and enhance their ability to drive business growth. In a digital-human hybrid contact center, IVAs can address routine and high-volume inquiries, while human agents are free to focus on more complex and value-added tasks and interactions.

It is important to note that implementing new technologies like Generative AI can sometimes be met with resistance from employees who are wary of change. As such, enterprise leaders should develop and execute effective change management strategies, clear communication channels, and well-structured training programs to facilitate smooth adoption by end-users. Involving stakeholders throughout the process and addressing their concerns can lead to greater acceptance which will help to maximize the benefits of AI initiatives.

Consider the Regulatory Landscape. As the litany of news headlines from the past several months illustrates, AI's regulatory compliance matters. Incorporating AI in the enterprise world, especially within the risk-averse financial sector, requires strict compliance with industry regulations and data protection laws. Executives must work closely with legal and compliance teams to ensure AI implementations adhere to all relevant guidelines.

It is for this very reason that Generative AI technology is not equipped to support enterprise environments when implemented on its own. Generative AI pulls from both public and proprietary sources to generate fast and accurate results, but this process also puts organizations at risk of data breaches. Below are some of the risks associated with the use of Generative AI in business:

- **Regulatory Compliance:** Enterprises operating within a complex landscape of regulations and industry standards must ensure compliance with relevant laws related to data privacy, cybersecurity, intellectual property, and industry-specific requirements. Non-compliance can result in legal penalties and damage to an organization's reputation. Regular audits and adherence to compliance protocols are essential to ensure organizations meet all regulatory obligations.

- **Data Security and Privacy:** With the increasing reliance on technology and data, protecting sensitive information becomes paramount. Generative AI models often require vast amounts of data for training, which may include sensitive customer information. Enterprises must address cybersecurity threats, including data breaches, hacking attempts and insider threats, to safeguard this valuable data. Compliance with data protection regulations, such as the General Data Protection Regulation (GDPR) or the California Consumer Privacy Act (CCPA), is crucial to avoid legal and reputational damage.

- **Vendor and Third-Party Risks:** Organizations often rely on external vendors and service providers for critical IT infrastructure and software, including Generative AI solutions. Given the above mentioned risks, enterprises need to carefully assess the security and reliability of these vendors, establish strong contractual agreements that include stringent security measures, and regularly monitor their performance. By diligently managing vendor relationships, enterprises can mitigate the risks associated with outsourcing and maintain a secure technological ecosystem.

The future of Generative AI is promising, and when its powerful capabilities are leveraged within the trusted guardrails of enterprise Conversational AI, organizations benefit from today's most innovative technology while minimizing their risk of regulatory violations and potential legal challenges.

Leverage AI Vendor Expertise. Implementing Conversational AI and Generative AI in-house can be a complex and resource-intensive process. Engaging with experienced AI vendors who specialize in AI solutions accelerates the implementation process by providing domain expertise and support, which enables enterprises to implement AI effectively and efficiently.

As bank executives strive to derive the most value from their Conversational AI and Generative AI investments, implementing these technologies thoughtfully becomes a strategic imperative. By aligning AI strategy with business objectives, empowering contact center agents, adhering to compliance and regulation standards, and engaging with experienced AI vendors, financial institutions can unlock the full potential of these technologies.
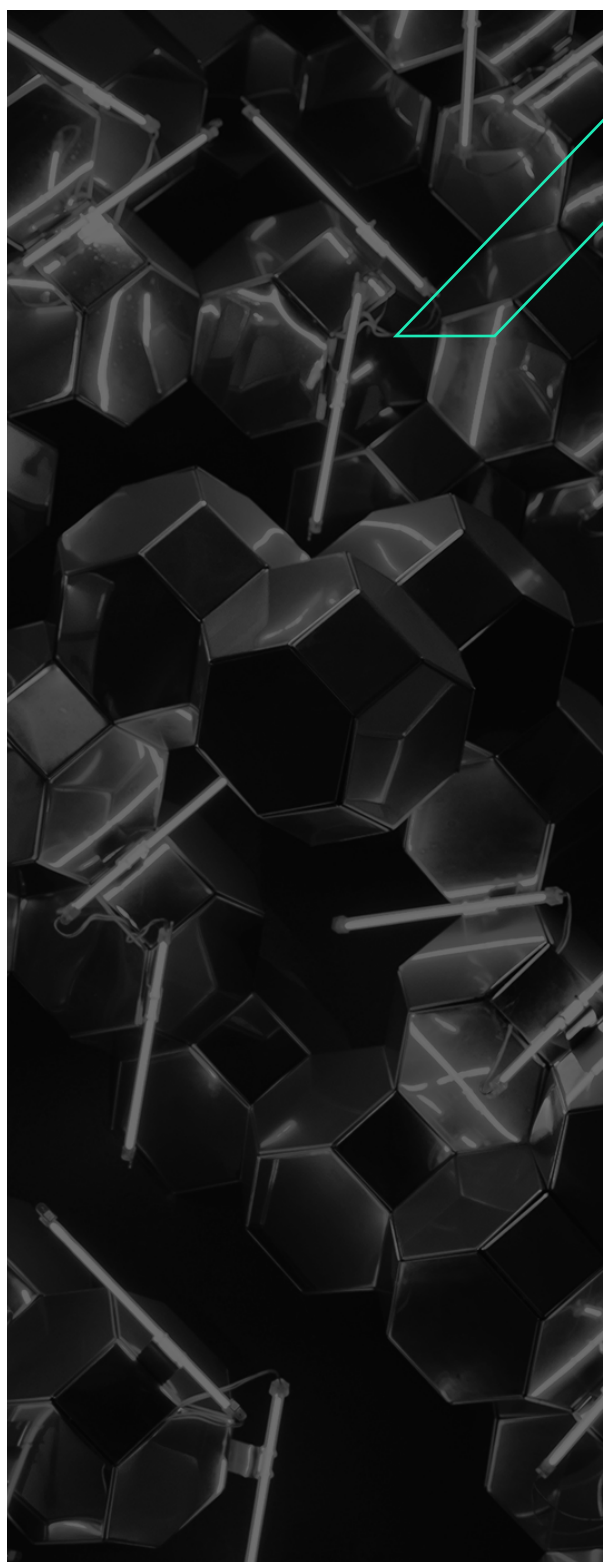
Tech landscape:
Amelia + Generative AI

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In the rapidly evolving landscape of AI tools, companies are presented with a wide array of options to enhance customer experiences and optimize agent performance. Amelia's Conversational AI platform is at the leading-edge of this new digital horizon, as it combines Generative AI and Conversational AI in a unified enterprise platform. In the following section, we will explore how Amelia serves as the right solution for enterprises and how Generative AI complements Amelia to drive even better customer and agent experiences.

Amelia + Generative AI: A Winning Combination

Amelia, the market-leading Conversational AI platform, enables enterprises to manage the end-to-end lifecycle of IVA development. Its deep comprehension of context and its ability to manage digressions, interruptions, and updates to information empowers financial enterprises to deliver seamless and personalized conversations with customers. Amelia delights end-users by delivering natural conversations at any time, on any channel, and in any language, which translates to meaningful business outcomes.

The power of Generative AI created an opportunity for Amelia to deliver even better experiences faster than anyone else in the market. Amelia has incorporated Generative AI in the following ways:

Amelia Builds Amelia
Enterprises can automatically create end-to-end optimized conversational flows leveraging Generative AI. Amelia invented a proprietary natural language compiler that arbitrates across multiple large language models (LLMs) to create conversational flows, intent and entity models, code for calculations, placeholders for integrations, and more. This accelerates the development process and ultimately the time-to-value for the enterprise.

LLM-Powered FAQ
This capability enables enterprises to rapidly create FAQ experiences by connecting Amelia to a knowledge base, PDFs, URLs, or other sources and leveraging LLMs to drive question answering with users. These experiences can be delivered to end users in a supervised or unsupervised manner, leveraging different LLMs based on needs and other considerations, and providing clarity on where the LLM sourced each answer.

Bring Your Own LLM
Many enterprises are researching and experimenting with building their own fine-tuned LLM on top of various foundation models, and Amelia enables them to leverage their LLM within the platform. Enterprises can either use the models available within Amelia or bring their own, providing flexibility for development that is unmatched in the market.

Amelia is dedicated to research and development to ensure its customers have access to the most cutting-edge technologies in a secure and trusted environment. The combination of Conversational AI and Generative AI in a unified platform accelerates value creation in the enterprise and scales the efficacy of any AI program.

The Right AI Platform for the Enterprise World
The combined impact of Generative AI and Cognitive AI within Amelia's safe and proven Conversational AI platform enables enterprises to accelerate the development of new verticalized use cases.

For example, leading global banks have deployed Amelia to fully handle complex queries such as fraud reporting, money transfers, payments, opening accounts, and more. Amelia seamlessly and securely connects with banks' back-end systems to pull relevant data to provide customers with accurate information and to act on their behalf. Amelia's robust security protocols ensure customer privacy is maintained, earning the trust of customers and regulatory bodies while simultaneously creating delightful customer experiences.

Amelia also enables business users of all levels of technical expertise to interactively design and build conversational flows and train intent models, signaling a massive step toward the democratization of Conversational AI. Users can even leverage these technologies to write code that executes calculations and creates integrations, making the design and build process significantly easier and ensuring that IVA implementations address unique business challenges.

Amelia: end-to-end AI-powered CX and EX

Providing extraordinary customer experiences is paramount to the success of today's enterprises. Customers expect fast, easy, personalized, omnichannel service, and they aren't afraid to look elsewhere if their current providers fall short of these demands. Plus, customers' benchmark for what "extraordinary" means keeps getting higher and more complex.

To meet these heightened expectations, Amelia's Conversational AI platform goes beyond traditional AI solutions, offering seamless end-to-end AI-powered experiences across all channels, complete with multimodal capabilities. Discover what's possible when AI is deployed to do more than conduct idle chatter: experience the Amelia difference.

The Amelia-Powered Customer Journey:

1. Seamless Customer Interactions
Amelia transforms customer interactions into effortless, natural conversations. When customers call into a contact center, Amelia greets them warmly and asks, «How can I help you today?» Customers can describe their issues in their own words, and Amelia's advanced Natural Language Understanding (NLU) allows the platform to accurately comprehend their intent and context.

As the first point of contact in Telefónica Peru's contact center, Amelia handles 100% of incoming calls with a 90.2% intent recognition rate. With the help of Amelia, Telefónica Peru has reduced the call abandonment rate in its contact center by 44%.

2. Intelligent Automation and Resolution
Amelia's cognitive capabilities enable the platform to automate and resolve a wide range of customer inquiries, from the simplest to the most complex. IVAs powered by Amelia address inquiries efficiently to provide quick and accurate solutions, save time, and enhance overall customer satisfaction. Amelia also offloads high-volume, repetitive requests from human agents, decreasing overall costs and creating a more efficient contact center.

Visionworks, a leading provider of vision care services, experienced strain within its customer service operations during the COVID-19 pandemic. Staffing shortages, in combination with spikes in overall call volume, contributed to a call abandonment rate of 95% for inbound calls, a below-par CSAT score, and overall reduced operational efficiency.

To address this problem, Visionworks deployed Amelia as a virtual specialist in September 2020. Amelia now handles all inbound calls for two-thirds of Visionworks' retail stores, totaling upwards of approx. 22,500 calls per day. Amelia also schedules an average of 1,000 eye exams daily and often fully books appointment availability at many store locations several weeks out, increasing store revenue and improving overall time management for optometrists and patients.

3. Dynamic Call Routing and Escalation
For inquiries that require human intervention, Amelia intelligently routes the caller to the most appropriate queue and seamlessly escalates the call to the most suitable agent. This intelligent call routing optimizes resource allocation and ensures that customers receive the support they need from skilled agents.

4. Side-by-Side Agent Collaboration
As agents engage with customers, Amelia actively supports them through side-by-side collaboration. Amelia continuously monitors the conversation, offering real-time suggestions for the next best actions and empathetic responses. These AI-powered prompts help agents deliver personalized service, leading to enhanced customer engagement. Amelia can even automate tasks on behalf of the agent, such as retrieving information from a knowledge base and surfacing it for the agent or automating transactional inquiries.

One of the largest publicly held personal lines property and casualty insurers in the United States decided to optimize its customer service using Amelia. The insurer deployed Amelia as a Conversational AI Whisper Agent at its contact center to reduce call times while increasing customer satisfaction. Since Amelia's deployment, the insurer's average call duration dropped from 4.6 to 4.2 minutes, translating into a substantial increase in total productivity considering the thousands of calls handled each day.

Amelia's Phenomenal Business Impact

The end-to-end AI-powered experience offered by Amelia drives remarkable business results. Amelia's seamless automation and agent-support capabilities ensure that customer inquiries are handled efficiently and effectively, leading to decreased average handle time (AHT), faster resolutions, a lower cost to serve, and, ultimately, increased customer satisfaction and loyalty.

From intelligent automation and call routing to dynamic agent support, Amelia redefines how companies engage with customers and empower their agents. By delivering seamless, delightful interactions and driving phenomenal business results, Amelia delivers on the promise of AI for the enterprise.

Conclusion

How to prepare your enterprise for AI

Every organization will have a different experience implementing AI into their existing systems, including at a cultural level. Given the breadth of experience that Amelia and Sia Partners have in supporting AI deployments, we recommend one thing: Start Small. Try implementing Conversational AI and Generative AI into one or a few smaller journeys to see how your organization responds. The ROI on your smaller journey will be realized sooner and, with a reduced time to market, you can leverage your successful use case to encourage further expansion into Generative AI. Should you run into any road bumps in your journey, it will be easier to navigate and learn from your mistakes compared to a larger and costlier initial endeavor.

If you are looking for more information on what an initial use case or Conversational AI journey may look like, please reach out and we will show you the power of Conversational AI and Generative AI within Amelia!

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About Sia Partners

Sia Partners is a next-generation management consulting firm and pioneer of Consulting 4.0. We offer a unique blend of AI and design capabilities, augmenting traditional consulting to deliver superior value to our clients. With expertise in more than 30 sectors and services, we optimize client projects worldwide. Through our Consulting for Good approach, we strive for next-level impact by developing innovative CSR solutions for our clients, making sustainability a lever for profitable transformation.

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About Amelia

Amelia is one of the world's largest privately held AI software companies and a global leader in Enterprise Conversational AI. The company's technology is trusted by organizations across an array of industries to automate operations, improve customer experience and optimize business outcomes. Amelia's platform develops and deploys AI tools that manage critical tasks and processes, enabling employees to be more productive and deliver better results while reducing operational costs. Consistently recognized by third-party analyst firms including Gartner's Magic Quadrant 2023 as a market leader, Amelia has powered the voice operations of global Fortune 500 leaders including Telefónica, BBVa and BNP Paribas. Backed by strategic investments from the Build Group and Monroe Capital, Amelia is headquartered in New York City and serves customers globally through offices throughout the US, Europe, and Asia Pacific.

www.amelia.ai